FACT SHEET

OAK PARK STORMWATER MANAGEMENT & FLOOD MITIGATION PROJECT

CITY OF NEW ORLEANS

OVERVIEW

The Oak Park Stormwater Management and Flood Mitigation Project transforms a cluster of five vacant parcels on Perlita Street, as well as a portion of the adjacent public right-of-way (ROW) on Perlita Street, into a stormwater management area that reduces the risk of flooding for the surrounding neighborhood. The vacant parcels are five contiguous New Orleans Redevelopment Authority (NORA) owned parcels that are situated mid-block on the east side of Perlita Street, with Aviators Street to the north and Burbank Drive to the south. The project is funded through the FEMA Hazard Mitigation Grant program.

Five contiguous vacant parcels

Modeled Flooding: 2 year Storm Map

EXISTING FLOODING CONDITIONS

The project team modeled flooding in the project benefit area under existing conditions for 2 year, 5 year, and 10 year storm conditions. Even under 2 year storm conditions as shown in the adjacent image, flooding encroaches past the street and onto certain properties, particularly near the intersections at Burbank Street and Cartier Street, and near Madrid Street and Perlita Street. During the 10-year design storm, nearly all streets in the benefit area experience flooding that encroaches onto properties, and the area around Lake Area High School is particularly affected, compromising access to the school.

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PREFERRED OPTION

Configuration of Bioswale

LANDSCAPE INTERVENTIONS

The project site encompasses 27,720 square feet or 0.64 acres. Additional storage and landscape interventions in the "Preferred Option" include a bioswale that replaces the eastern travel and parking lanes of Perlita Street, which feeds into a shallow basin on the project site (one foot deep at its deepest). Water from the basin can infiltrate through the soil and into the RTank below. The bioswale and pervious pavement offer additional storage capacity for stormwater. The table below compares the potential change in flood depth for existing conditions vs. after landscape interventions are implemented.

Average 10-year (24-hour) Storm Flood Depth			
Flood Depth, Existing Conditions	Flood Depth, Proposed Conditions	Reduction in Flood Depth	Reduction in Duration of Water in Street
1.14 ft	0.66 ft	0.48 ft	1.37 hr

The project team tested several design scenarios on the project site and adjacent areas of the right-ofway and conducted final modeling on two scenarios which are referred to as the “Preferred Option” and the “Non-Preferred Option”. The Preferred Option incorporates a large underground storage tank (RTank by ECOservices), which is located underneath the project site to offer additional storage and allows infiltration due to its permeable base and sides. The adjacent image displays the configuration of the bioswale and basin below. In the Preferred Option, the RTank system eventually drains into a new manhole on Aviators Street between Perlita Street and Hamburg Street.

RTank System | Construction EcoServices

Bioswale | Asakura Robinson

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